



Situation Awareness and Collaboration Tool (SCOUT)

California's All Hazards
Situation Awareness and Collaboration Platform

Concept of Operations

April 2016



SCOUT Concept of Operations

SCOUT CONOPS v1.0 April 2016

Purpose of this Document

The purpose of this document is to provide guidance to users of SCOUT on the Concept of Operations (CONOPS) for use at the field, municipal, operational area, region and state levels of emergency management within California in accordance with ICS/SEMS/NIMS policy standards.

Assumptions

- Familiarity with the basic operation of SCOUT features such as logging in, joining an incident, creating rooms, using the drawing tools, using the Whiteboard chat, and using the mobile app.
- An understanding of the all-hazard/all-threat emergency management doctrine in California—in particular ICS/SEMS/NIMS and ESFs/EFs—and accepted emergency management standardized practices and procedures.
- This document should be considered a living document that will evolve throughout the initial deployment of SCOUT.

Concept of Operation

One of the key principles adopted by ICS is flexibility— SCOUT is adaptable and scalable to an all hazards, all threats environment. SCOUT supports this fundamental principle by creating a flexible environment within which users work. The concept of operations outlined below is designed to provide a level of consistency in our approach to using SCOUT within California to support emergency management and homeland security activities.

General Principles

- SCOUT should be used as a tool to assist and complement existing collaboration forums, information flows and decision support tools outlined in California's emergency management and homeland security doctrine and emergency plans.
- Where incident management is likely to require coordination across a geographical area and/or across various response disciplines or cooperating agencies the Incident Commander (IC), municipal EOC Manager, Operational Area EOC Manager, REOC Director, and/or SOC Executive Duty Officer should consider directing creation of a SCOUT incident to assist with building situation awareness and common understanding among responding personnel and agencies.
- For shared situational awareness to be successful the responsible owner must encourage and support active participation in using SCOUT for collaboration, encourage access by all who need to view it, and encourage information sharing using SCOUT Chat and/or direct input into incident rooms by those who have information to share. e.g. Emergency Services Coordinators (ESCs) and/or Agency Liaisons.



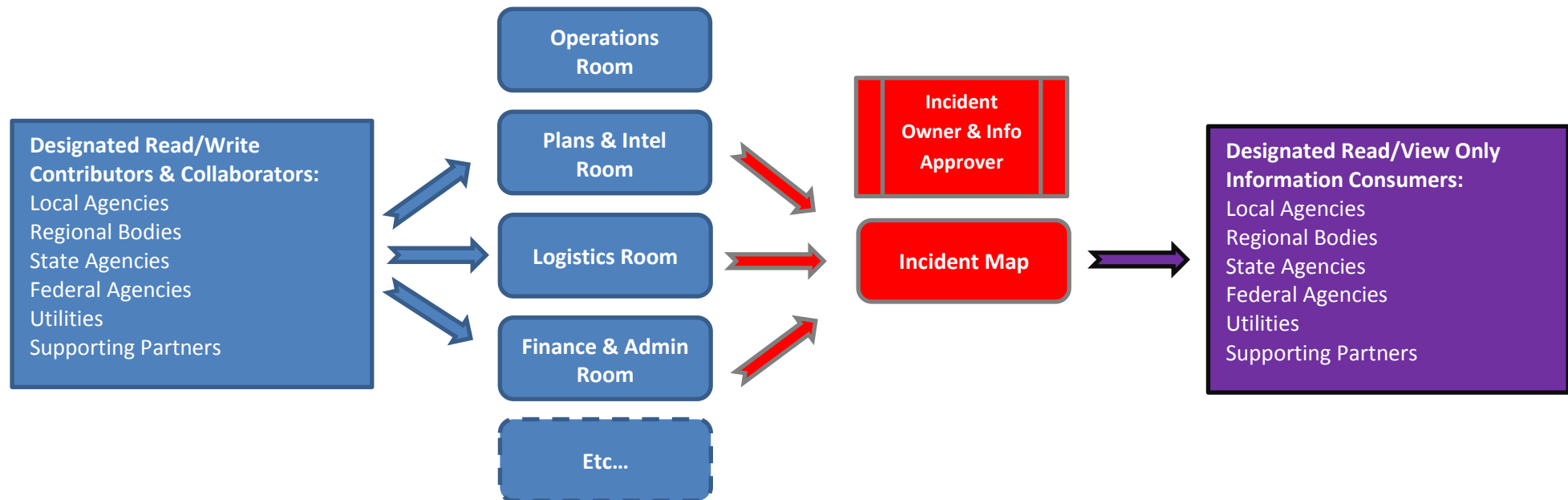
SCOUT Concept of Operations

- Where possible, one shared situational “picture” per incident is desirable. If more than one “picture” is created, every effort by the controlling body should be made to consolidate incident mark-ups into one “picture”. This emphasis on collaboration, and sharing will increase situation awareness among first responders and across responding agencies.
- SCOUT is particularly useful in assisting with emergency incident management and homeland security planning and response activities. As an event evolves, one of the most challenging issues is effective information sharing across disciplines and jurisdictions. Responders need timely and actionable information to inform effective decision-making and maintain a safe working environment. This tool assists with consistent communication about the threat / hazard so that stakeholders (approved users) can increase situational awareness and make strategic decisions about appropriate response actions.
- SCOUT may be used at the field, local, operational area, regional or state levels to facilitate the initial intelligence gathering activities for an evolving emergency or homeland security event. The intelligence aggregated by SCOUT would later transfer to incident and emergency management when appropriate.
- Personnel contributing emergency management information into SCOUT should do so through agreed upon practices, and as a result of a discussion with the agency having jurisdiction to determine the appropriate location and format for the contribution. e.g. utilization of new room, adding information to existing rooms, providing the information via the Chat, etc.
- Information created within the SCOUT environment is meant for “Official Use Only” and shall not be shared outside of the SCOUT environment without the permission of the owner of the data.



SCOUT Concept of Operations

Coordinated Collaboration via SCOUT



Operational Workflow

- Incident Commander or Agency Duty Officer directs creation of “Incident” in SCOUT.
- Supporting agencies create “Collaboration Rooms,” as needed, based on pre-defined themes.
- Incident Command reviews and approves information from Collaboration Rooms for inclusion on the single, common Incident Map.
- **Incident Map** provides shared situational awareness among all collaborators and read/view only consumers within supporting agencies.
 - **Collaboration Rooms** provide shared situational awareness among theme-specific communities or functions, i.e. agencies coordinating public evacuations.



Field, Local, Regional and State Level Use of SCOUT Incidents

SCOUT Incident	Field	Local Area (County-Municipal)	Region	State
Considerations/Triggers for Incident Creation	Incident Commander/Agency determination considering: <ul style="list-style-type: none"> Enhanced shared situational awareness Activation of an EOC Incident has exceeded local resources and Mutual Aid has been requested Multiple agencies involved - collaboration Additional Intelligence requirements 	County/Municipal Level Emergency Manager Incident-level considerations, plus: <ul style="list-style-type: none"> Impacts more than one jurisdiction or discipline. 	Regional Administrator Local considerations, plus: <ul style="list-style-type: none"> REOC activated Impacts more than one OA OAs have requested Mission Tasking Multiple events occurring simultaneously 	State Operations Center/CA State Warning Center Regional considerations, plus: <ul style="list-style-type: none"> Overview active at all times SOC activated More than one region impacted Catastrophic event
Area of Interest	Incident Area of Operations	Local Jurisdiction, Operational Area	Cal OES Region	State of California
Scope of COP	Incident Operations	Local jurisdiction, Operational Area	Regional Operations	State Operations
Responsible Owner	Incident Commander	Emergency Manager	Deputy Regional Administrator	State Warning Center or Executive Duty Officer or SOC Director
Maintained by	Intelligence Unit/Section Planning Section – Situation Unit	Plans/Intel - Sit Stat Unit	Deputy Regional Administrator or designee	SOC Plans/Intel – SitStat Unit CSWC Duty Officer
Nominal Period of Use	Duration of the Incident/Operational Period	Until EOC is deactivated	When the REOC is operational	CSWC Steady State 365/24/7 When SOC is activated.



Outcomes / Focus	<p>To support Incident Commander with enhanced:</p> <ul style="list-style-type: none"> Operational situational awareness Field observations and intelligence Operational Intelligence generation Development of future scenarios / Advance Planning Development of IAP – supporting planning Impact and consequence analysis Alert & Warning Initial Impact Assessment planning Traffic management planning Evacuation management planning Sheltering Donations Recovery Fire Perimeter 	<p>To support local jurisdiction and Operational Area EOC Managers with awareness of Incident Command outcomes, including:</p> <ul style="list-style-type: none"> Operational situational awareness Understanding of resource capacity limits Focused recovery Line of control – ICP status in Op Area Population Impacts Critical Infrastructure Impacts AVL and GPS locator information Evacuation management Road Closures Evacuated area security Alert & Warning Repopulation planning Damage assessment Hazard Areas Safe Zones ICP and Staging area locations Regional cache locations Vulnerable populations, Access and Functional Needs 	<p>To support the Regional Administrator with awareness of Op Area outcomes, plus:</p> <ul style="list-style-type: none"> High level situational overview of significant operational activity across the Region incorporating: Line of control – ICP & OpArea EOC status in Region Issues identification - <u>inter</u> & <u>intra</u> Region: <ul style="list-style-type: none"> Regional resource utilization Traffic management plans Evacuation management plans Public information – warnings/media Identification of risks and their consequences outlined in emergency plans Cross border (where relevant) operational activity – location, trends, issues, etc. 	<p>To support the State Warning Center and/or State Operations Center with awareness of Regional outcomes, plus:</p> <ul style="list-style-type: none"> Line of control – ICP, EOC, REOC, SOC status across the State <ul style="list-style-type: none"> Control strategy Critical control factors Critical community and consequence issues. Critical infrastructure protection/recovery Impacted and Potential Impact Zones Current and predicted situation (including damage and losses) High level State loss and assessment <ul style="list-style-type: none"> State resource utilization e.g. aircraft Future state scenarios - threats Future state scenarios - emergency Critical infrastructure Incident Management Teams Intelligence on new significant incidents developing – Rapid process
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Key Collaboration Groups	<ul style="list-style-type: none"> • IMT functional areas • Incident Command Post • Local Dept Operation Centers • City & County EOC • REOC • SOC 	<ul style="list-style-type: none"> • Local Dept Ops Centers • City & County EOC • REOC • SOC • Amr Red Cross EOC • Local Transit and Airport Operations Centers • Local Military Operations Centers 	<ul style="list-style-type: none"> • REOC • Other counties • EMMA Coordinators • ESCsSOC/CSWC 	<ul style="list-style-type: none"> • SOC • EDO • EF/ESF • FEMA / NRCC • Other Cal OES REOCs • Other State Ops Centers • DHS/FEMA HQ • Partner Operations Centers
Frequency of Update (Currency of info)	<p>As determined by the responsible owner.</p> <p>As a minimum, in line with existing timeframes for situation reporting, briefings and associated planning documentation.</p> <p>Where possible, as often as possible.</p>	<p>As determined by the responsible owner.</p> <p>As a minimum, in line with existing timeframes for situation reporting, briefings and associated planning documentation.</p> <p>Where possible, as often as possible.</p>	<p>As determined by the responsible owner.</p> <p>As a minimum, in line with existing timeframes for situation reporting, briefings and associated planning documentation.</p> <p>Where possible, as often as possible.</p>	<p>As determined by the responsible owner.</p> <p>As a minimum, in line with existing timeframes for situation reporting, briefings and associated planning documentation.</p> <p>Where possible, as often as possible.</p>



SCOUT Concept of Operations

SCOUT Incident Rooms

SCOUT uses a concept of “rooms” within an incident to facilitate different map workspaces for collaboration between users. Rooms can be created for a specific theme, which allow users with access to the room an opportunity to work together without drawing over the top of other user’s work. Rooms can be secured for access by specific users.

When a new SCOUT incident is created, the system automatically creates **two initial rooms**:

Incident Map This room is visible system-wide to all users; all users have read-only access; the creator of the Incident has read/write access. The Incident Map is the officially approved representation of the incident, and is intended to provide a “common” situational awareness to all incident responders.

Working Map This room is visible system-wide to all users; all users have read/write access. The Working Map is a shared collaboration environment available to all users. It is used in the absence of theme-specific rooms.

The responsible owner (agency having jurisdiction/Incident Commander) of the SCOUT incident may determine that additional rooms are required to facilitate collaboration between users on specific themes.

As a minimum, the only official information is that published in the Incident Map by an authorized user on behalf of the authority having jurisdiction, once approved.

SCOUT incident rooms should indicate the currency and the planned update frequency (where relevant) of the information provided utilizing the Whiteboard Chat log and potentially a text message object. An expiration time is also recommended for any information with time criticality. This could be indicated via a note in the feature attributes, the ‘Whiteboard Chat’ or a text object visible to all in the map view. While flexibility exists in creating rooms for specific themes, where possible subsequent rooms covering the same theme should not be created unless they have a time slice or snapshot theme.



SCOUT Concept of Operations

Default Room Names

A number of default room names have been prepared so that users are more easily able to recognize the intended use for a given collaboration room and to reduce confusion with room names. Most of the rooms are aligned with ICS functional area names and therefore should be familiar to most emergency management personnel.

The default rooms are listed in the 'Create New Room' dialogue box. Permission should be sought from the SCOUT incident owner before a new room is created.

Room: Incident Map <ul style="list-style-type: none">• Considered the 'official' representation of the incident.• Locked initially to the creator of the incident.• Room permission for write will need to be given to users delegated to update the Incident Map.• Typically information should be approved by the responsible owner before displayed on the Incident Map.• May contain many layers of information created using the collaboration rooms.	Room: Working Map <ul style="list-style-type: none">• Initial collaboration room in the absence of other rooms created for a specific theme.• Has no official theme for collaboration.	Room: Incident Commander <ul style="list-style-type: none">• Collaboration room.• Used by the Incident Commander
Room: Public Information Officer <ul style="list-style-type: none">• Collaboration room.• Development of information that will be shared with the public	Room: Liaison Officer <ul style="list-style-type: none">• Collaboration room.• Community profiles.• Cooperating & Assisting Agency Support	Room: Operations Section Chief <ul style="list-style-type: none">• Collaboration room.• Current operational situation state capture.• Marking of known or potential risks.• Development of future state scenarios.• Field intelligence, observations, sensor information.



Room: Planning Section Chief <ul style="list-style-type: none"> • Collaboration room. • Used by the Planning Section to develop plans. • Specific plans for evacuation, traffic management or initial impact assessment have their own rooms. • Used to support options analysis. • Possible additional rooms include: <ul style="list-style-type: none"> ○ Initial Incident Briefing Room ○ Incident Objectives Room 	Room: Finance/Admin Section Chief <ul style="list-style-type: none"> • Collaboration room. • Used by the Finance/Admin Section • Used to support analysis. • Cost tracking planning. 	Room: Logistics Section Chief <ul style="list-style-type: none"> • Collaboration room. • Logistics planning.
Room: Law Branch <ul style="list-style-type: none"> • Collaboration room. • Evacuation Area and Routes • Evacuation management planning. • Key timings articulated. • Evacuation centers, staging areas, resources. • Evacuation routes mapped. • Evacuated area security plan • Repopulation plan developed • Road closures 	Room: Fire & Rescue Branch <ul style="list-style-type: none"> • Collaboration room. • Possible additional rooms include: <ul style="list-style-type: none"> ○ FMAG Room 	Room: Medical/Health Branch <ul style="list-style-type: none"> • Collaboration room. • Medical and Health planning.
Room: Situation Status Unit <ul style="list-style-type: none"> • Collaboration room. • Situation Status planning. • Situation Unit master map for tracking incident intelligence (NWCG Definition of Situation Map) • Draws from GISS and Field Observer rooms 	Room: Resources Unit <ul style="list-style-type: none"> • Collaboration room. • Resources planning. • Mark-up of information supporting establishing the COP for the Resources Unit. 	Room: Communications Unit <ul style="list-style-type: none"> • Collaboration room. • Communications planning.



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Room: Supply Unit <ul style="list-style-type: none">• Collaboration room.• Supply planning.	[Secured Rooms] <ul style="list-style-type: none">• Once created only those with permission to collaborate in the room will see it and access it.• Used for sensitive collaboration work, perhaps with agencies or organizations who require a lower profile within the SCOUT community.	[custom room names] <ul style="list-style-type: none">• Custom collaboration rooms may be required to support collaboration on different themes not already listed.• Remember that rooms cannot be renamed or deleted once created – be careful what it is called.•
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Secure Incident Rooms

All rooms are visible to users of SCOUT by default. The responsible owner may also request certain rooms to be secured, which will hide the room from all users except those specifically given access to the secured room. Rooms should not be secured without permission from the responsible owner.

- Note that these secured rooms are not visible to anyone unless they are given specific permission to contribute to the room.
- Consideration for managing the ongoing use of a secured room between shifts, in particular ensuring subsequent personnel are given permission to manage the secured room.

Phase 1 Rollout will have the following Rooms pre-configured per NICS v.5 configurations.

Select a room to create:

Command Staff: <ul style="list-style-type: none">IncidentCommanderPublicInformationOfficerLiaisonOfficerSafetyOfficer	General Staff: <ul style="list-style-type: none">Operations:<ul style="list-style-type: none">OperationsSectionChiefBranchDir1BranchDir2DivisionSupADivisionSupBDivisionSupCDivisionSupDDivisionSupXDivisionSupYDivisionSupZAirSupportGroupSupAirTacticalGroupSupStagingAreaManagerAirOperationsBranchDir	Plans: <ul style="list-style-type: none">PlanningSectionChiefResourcesUnitLeaderSituationUnitLeaderFieldObserverGISS Logistics: <ul style="list-style-type: none">LogisticsSectionChiefCommunicationsUnitLeaderSupplyUnitLeaderFacilitiesUnitLeaderGroundSupportUnitLeader	Finance: <ul style="list-style-type: none">FinanceAdminSectionChiefCompensationAndClaimsUnitLeaderCostUnitLeaderEquipmentTimeRecorder
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Enter a custom room (do not include the incident name or any whitespace) and press Enter.

☐ Make Room Secure



SCOUT Concept of Operations

Use of the Whiteboard Chat

The whiteboard chat feature in SCOUT allows users to leave a persistent log entry (between users and logins) for a room within an incident. This feature is extremely useful to help convey information relating to what the user is seeing in the room on the map, perhaps to help set context and to provide a clearer understanding of the assumptions used when marking-up the map. It is not recommended that the whiteboard chat be used as a tasking tool.

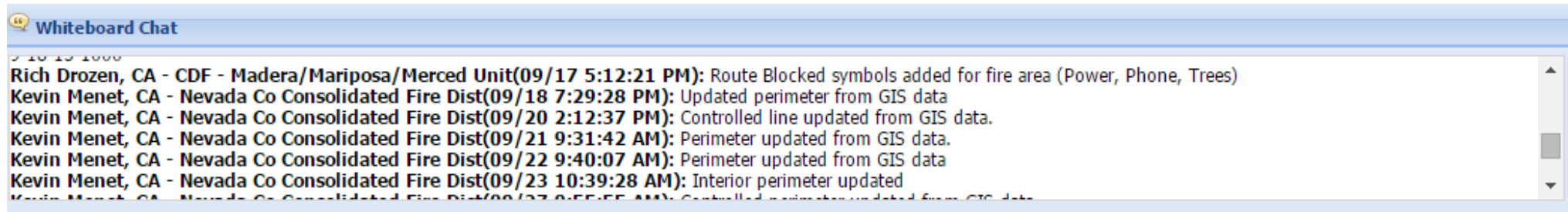


Figure 1 - Example of the Whiteboard Chat log

Suggestions for whiteboard chat log entries include:

- Status or currency of work in the room.
e.g. this room will remain inactive until day shift tomorrow 20-Jan-15
- Descriptions of what a collection of objects are describing in the room, adding additional context.
e.g. the most recent active fire edge data has been added based on line scans run yesterday and prepared overnight.
- Information that may have time sensitivity.
e.g. please note the traffic management points visible now expire after 2230 hrs tonight
- Verification status of objects.
e.g. observation water height photos for the flooding have been sourced from social media and have not been verified by another source.
- Entering any other pertinent information that needs a "time-stamped" entry to ensure appropriate awareness, exchange information or assist with mitigation of the incident.



SCOUT Concept of Operations

Mark-up Object Attributes

A range of simple drawing tools are available in SCOUT to facilitate marking up maps within rooms of an incident. While the color, shape, symbol or other visible attributes may mean something to the creator, it is important to ensure that other users viewing these mark-up objects understand what they convey and will be able to understand their context within the incident. Object edit history is maintained in the SCOUT's back-end system, including who created and who subsequently edited each object.

It is recommended that you always use the 'feature attributes' associated with every object to include some simple notes about the following meta-data:

- Age – time of collection or age.
e.g. Field intelligence collected may be days or hours old. Currency – how long will this information remain current?
e.g. this information will be considered too old by what time/date? Expiry time?
- Source – where did the information come from?
e.g. IAP, walked GPS track from FOB Joe Smith, local knowledge, census data 2011, IMS, etc.
- Verification – has the information been verified? Is it trusted? Is it accurate?
e.g. unverified social media reports, incident ground radio traffic, reported on Channel 7 news
- Feature Attribute Attachments
e.g. upload documents, photo's, etc.

Specific considerations for your notes by the type of object are provided in the table below:

Polygons and Shapes	Drawing Symbols	Vertex Lines	Text
<ul style="list-style-type: none">• What does it represent?• Is the color important?• Is the shape important?• Is the size accurate?• Is the polygon style important?	<ul style="list-style-type: none">• Does the symbol image easily convey what it is?• Is the exact location of the symbol important?• 	<ul style="list-style-type: none">• Is the color important?• Is the line thickness important?• Is the line style important?• Is the positioning accurate?	<ul style="list-style-type: none">• Is the color important?• Is the text size important?• Is the positioning important?• Is it clear what the text relates too?



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Management of Data Uploads (GIS Users)

- General users of SCOUT cannot by default upload layer files into SCOUT. A “GIS User” status is required.
- Users with this ability should upload their data files into SCOUT and move them under the relevant incidents to keep the “Uploads” folder orderly.
- Files that are not required and could be deleted as they are no longer needed should be deleted by the GIS User that uploaded them. Don’t delete other files unless you have been given permission.

Public Information – “Publish” Rooms

This section is a placeholder for a future feature and its associated processes that are currently under consideration.

Management of SCOUT Incidents

This section is not to be confused with the Administration of SCOUT. The topics in this section are designed to provide context around the management of SCOUT incidents by users of the system in a collaborative environment.

Resolving Duplicate SCOUT Incidents

- As per existing operational doctrine with other incident management systems, the creation of duplicate SCOUT incidents should be avoided to reduce potential confusion.
- It is recognized that this may happen as emerging incidents evolve over time. Every effort should be made to migrate information generated in SCOUT incidents into one SCOUT incident owned by the appropriate person representing the incident/event.
- The owner of the SCOUT Incidents that need to be merged should be contacted to organize for their content to be copied across to the agreed SCOUT incident and then archived to reduce confusion.

Archiving SCOUT Incidents

- The incident owner should make the decision to archive a SCOUT incident.
- SCOUT incidents that are not in use should be archived to help reduce the number of active incidents listed.
- The Agency Administrator will review Agency-owned incidents on a weekly basis, identify the owners and facilitate the archiving of those incidents that seem un-used or clearly relevant to an incident or date that has passed.



SCOUT Concept of Operations

Obtaining Technical Support

- If you have an **operational** problem with the application or **user account issue**, contact your Agency Administrator per your Agency's SOP.
 - If the problem is diagnosed as a technical problem, your Agency Administrator will escalate it to Tier 2 Technical Support per the SCOUT Support Plan.
- If you have a confirmed **technical** problem with the application, submit the issue from within SCOUT via the built-in feedback tool.
- In the Tools menu you will find "email feedback report" which will allow you to add a description of the issue and submit it. This process will also capture relevant information, such as who you are, the time and date, system information including the web browser and computing architecture, and a sample of recent SCOUT activity to assist with technical support.
- If the technical support requires immediate attention you should contact the **[TBD]**.

Note: Users who mis-diagnose technical problems and escalate directly to Tier 2 consistently, will be referred to their Agency Administrator for re-training.

Obtaining Operational Use Assistance

- The SCOUT User Manual is available from the SCOUT Help menu.
If you need to speak to someone during business hours, contact your SCOUT Agency Administrator. Contact list available at www.caloes.ca.gov/scout.



Revision History

Document Name	SCOUT Concept of Operations
Document Owner	CAL OES
Revision Date	
October 29, 2015	Initial draft for comment by the NICS/SCOUT transition team.
February 15, 2016	Final draft of version 1.0 submitted for Executive review and approval.
April 25, 2016	Version 1.0 Published

End of Topic

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